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| APPLICATION NO.   | FILING DATE     | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. | 1 |
|---|-----------------|----------------------|---------------------|------------------|---|
| 09/657,368  | 09/07/2000      | Yasuyuki Nakajima    | 001162              | 2481             |   |
| 38834   | 7590 11/28/2006 |                      | EXAM                | INER             | 1 |
| WESTERMAN, HATTORI, DANIELS & ADRIAN, LLP 1250 CONNECTICUT AVENUE, NW |                 |                      | DONAGHUE, LARRY D   |                  |   |
| SUITE 700   |                 | ART UNIT             | PAPER NUMBER        |                  |   |
| WASHINGTO   | TON, DC 20036   |                      | 2154                |                  |   |
|   |                 |                      |                     |                  |   |

DATE MAILED: 11/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

|  |  | Application No.   | Applicant(s)   |  |  |  |  |
|--|--|---|--|--|--|--|--|
|  |  | 09/657,368  | NAKAJIMA ET AL.  |  |  |  |  |
|  | Office Action Summary  | Examiner  | Art Unit   |  |  |  |  |
|  |  | Larry D. Donaghue   | 2154   |  |  |  |  |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply           |  |   |  |  |  |  |  |
| WHIC<br>- Exter<br>after<br>- If NC<br>- Failu<br>Any  | ORTENED STATUTORY PERIOD FOR REPLY CHEVER IS LONGER, FROM THE MAILING DATE of time may be available under the provisions of 37 CFR 1.13 SIX (6) MONTHS from the mailing date of this communication. It period for reply is specified above, the maximum statutory period were to reply within the set or extended period for reply will, by statute, reply received by the Office later than three months after the mailing and patent term adjustment. See 37 CFR 1.704(b). | ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tirr vill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONEI | N. nely filed the mailing date of this communication. D (35 U.S.C. § 133). |  |  |  |  |
| Status   |  |   |  |  |  |  |  |
| 1)⊠  | Responsive to communication(s) filed on <u>08/31</u>   | <u>//2006</u> .   |  |  |  |  |  |
| 2a) <u></u> □  | This action is <b>FINAL</b> . 2b) This action is non-final.  |   |  |  |  |  |  |
| 3)   | Since this application is in condition for allowar   | nce except for formal matters, pro  | secution as to the merits is   |  |  |  |  |
|  | closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.  |   |  |  |  |  |  |
| Disposition of Claims  |  |   |  |  |  |  |  |
| <b>4</b> )⊠  | 4)⊠ Claim(s) <u>1-3,14 and 34</u> is/are pending in the application.   |   |  |  |  |  |  |
| •  | 4a) Of the above claim(s) is/are withdrawn from consideration.   |   |  |  |  |  |  |
|  | 5) Claim(s) is/are allowed.  |   |  |  |  |  |  |
| 6)⊠  | Claim(s) 1-3,14 and 34 is/are rejected.  |   |  |  |  |  |  |
| 7)   | Claim(s) is/are objected to.   |   |  |  |  |  |  |
| 8)   | Claim(s) are subject to restriction and/or   | r election requirement.   |  |  |  |  |  |
| Applicati  | on Papers  |   |  |  |  |  |  |
| 9) 🗍   | The specification is objected to by the Examine  | r.  |  |  |  |  |  |
| 10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.  |  |   |  |  |  |  |  |
|  | Applicant may not request that any objection to the  | drawing(s) be held in abeyance. See   | ∋ 37 CFR 1.85(a).  |  |  |  |  |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).     |  |   |  |  |  |  |  |
| 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.                 |  |   |  |  |  |  |  |
| Priority (   | ınder 35 U.S.C. § 119  |   |  |  |  |  |  |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: |  |   |  |  |  |  |  |
| 1. Certified copies of the priority documents have been received.  |  |   |  |  |  |  |  |
| 2. Certified copies of the priority documents have been received in Application No   |  |   |  |  |  |  |  |
|  | 3. Copies of the certified copies of the priority documents have been received in this National Stage  |   |  |  |  |  |  |
| application from the International Bureau (PCT Rule 17.2(a)).  |  |   |  |  |  |  |  |
| * See the attached detailed Office action for a list of the certified copies not received.                                   |  |   |  |  |  |  |  |
| Attachmen  | t(s)   |   |  |  |  |  |  |
|  | e of References Cited (PTO-892)  | 4) 🔲 Interview Summary<br>Paper No(s)/Mail Da   |  |  |  |  |  |
| · <u></u>  | e of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO/SB/08)   | 5) D Notice of Informal P   |  |  |  |  |  |
| Paper No(s)/Mail Date 6) Other:  |  |   |  |  |  |  |  |

Application/Control Number: 09/657,368

Art Unit: 2154

- 1. Claims 1-3, 14 and 34 are presented fro examination.
- Claims 4-8 and 15-33 have been withdrawn as directed to the non-elected invention.
- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claims 1,14 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's admitted prior art (AAPA) in view of Yano et al. (6,701,372).
- 5. AAPA taught the invention substantially as claimed including input means for receiving said picture information (fig. 25 10); an encoder encoding said picture information from the input means on a preset cycle in a real time manner (fig 25 11); and storage means for writing and storing real-time-encoded frame data on said picture information from the encoder for each frame (fig. 25 12).
- AAPA did not expressly teach the division means or the transmission timing control and transmission means.
- Yano et al. taught the division means for sequentially dividing said real-time-encoded frame data stored in the storage means into packets for each frame (col. 3, line 57 col. 4, line 3 and col. 13, lines 38-48),; transmission timing control and transmission means for controlling transmission timing to sequentially transmit the packets corresponding to the respective frames to a network, wherein packets corresponding to respective frames are transmitted sequentially to the network during a period between when said encoder writes ends writing real-time encoded data corresponding to a frame to the storage means and when said encoder begins writing real-time encoded data corresponding to a next frame to the storage means, col. 3, line 57 col. 4, line 3 and col. 13, lines 38-48, it is set forth "Upon completion of transmission of data, data generation (step S201), and transmission (step S202) repeat themselves.", therefore the data encoded data is not write until after the transmission is completed, and the encoding of data takes (place in the data generation step), and for transmitting the packets to the network according to a connection-less type protocol (col. 2, line 66 col. 2, line 7).
- 8. It would be obvious to combine these references as it would allow for the optimal data transfer by AAPA with the teaching of Yano et al.'s dynamically controlling the change in the transfer rate in correspondence with the conditions on the network.

- 9. Claims 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over AAPA in view of Yano et al. (6,701,372) as applied to claims 1 and 14 above, and further in view of Boyce (6,490,705).
- 10. As to claim 2, Yano et al. taught the transmission timing for transmitting the divided packets to the network is determined from an encoded frame interval and a frame data storage time (Yano et al. col. 13, line lines 38-45).

Yano et al. did not expressly suggest using the division means for dividing each frame data into the packets, divides each of said encoded frame data into the packets in size suited for an Ethernet maximum transfer unit.

Boyce expressly suggested for IP transmission using Ethernet MTU as size of the packet (col. 8, lines 65-66). ). It would have been obvious to modify the teaching of Yano et al. with that of Boyce to gain maximum through put.

11. As to claim 3, , Yano et al. taught for transmitting the packets to the network is set so that a transmission time, in seconds, for transmitting the K-th frame data to the network corresponds to a value obtained by subtracting a write time, in seconds, for which said encoder writes the K-th frame data into said storage means, from a frame interval, in seconds, between the K-th frame data and a (K + 1)th frame data (Yano et al. col. 13, line lines 38-45).

Boyce expressly suggested for IP transmission using Ethernet MTU as size of the packet (col. 8, lines 65-66) and division means for dividing each frame data into the packets is constituted so that: a payload size of a transmitted UDP packet corresponds to a value obtained by subtracting an IP header size and a UDP header size from an Ethernet maximum transfer unit; and the number of UDP packets divided from a K-th frame corresponds to a value obtained by dividing a data size in bytes, of the K-th frame by the payload size, in bytes (col. 8, lines 65-66 and col. 9, line 35-39). It would have been obvious to modify the teaching of Yano et al. with that of Boyce to gain maximum through put.

- 12. Applicant's arguments with respect to claims 1-3 14 and 34 have been considered but are moot in view of the new ground(s) of rejection.
- 13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Larry D. Donaghue whose telephone number is 571-272-3962. The examiner can normally be reached on M-F 8:00-5:00.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan Flynn can be reached on 571-272-1915. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

ARRY D. DENAGHUE PRIMARY EXAMINED